NOTES ON SOME SPECIES OF MOLLUSCA COLLECTED IN CHINA FROM 1904 TO 1907, WITH DESCRIPTIONS OF NEW SPECIES.

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The majority of the species referred to in this communication were collected by Staff-Surgeon K. H. Jones at Hong-Kong and Weihai-wei between the years 1905 and 1907, but those from Shi Tao, in the province of Shantung, were obtained by the late Mr. C. A. Schwilp, who resided at that place. The species from Weihai-wei include four which were not observed there in 1901-2, and one of these at any rate, *Eulota (Cathaica) fasciola*, Drap., has probably been introduced since that time, perhaps from Shanghai, where it is fairly common. This species is very conspicuous and not at all likely to be overlooked. The remarkably local distribution of many species are here noted, on account of the localities in which they were found, in evidence of their area of distribution.

HELICARION IMPERATOR, Gould.

Of this common Hong-Kong species a specimen was taken at Little Hong-Kong Wood in 1906, which instead of being of the usual reddish horn colour was of a distinct greenish hue. This is the only shell of this species so coloured which was observed at Hong-Kong.

EULOTA (CATHAICA) FASCIOLA (Drap.).

This species, there is little doubt, has been introduced into Weihai-wei since 1902, perhaps from Shanghai, with which port there is constant communication, especially during the summer months, but possibly from Tien-tsin to the north, or even from the mainland opposite. This is not a species which is easily overlooked, and it was not observed on the mainland of Shantung. On the island of Wei-hai-wei it is confined to the residential portion, over which it is rapidly spreading, being particularly partial to gardens and their walls. The specimens are of fair size, and all of them present one band on the body-whorl with the exception of two, in one of which there are two bands and the other is bandless. One immature sinistral specimen was obtained.

SUCCINEA SINENSIS, Gray.

It is of interest to note that this species is commonly enough found at Hong-Kong in different parts of the island and at various altitudes, but always in flower-pots. Although often to be seen wandering away from the pots in which they live, they do not seem able to establish themselves elsewhere. Probably the species

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has been introduced in flower-pots from the neighbourhood of Canton. One specimen was taken in which the shell was a pale greenishwhite, the animal being of a normal colour.

SUCCINEA GIMLETTEI, n.sp.

Differs from *Succinea Sinensis*, Gray, by its narrower form and more elevated spire, much darker colour, broader penultimate whorl, and shorter and less dilated aperture. Alt. 9.75, diam. maj. 5.5 mm. Aperture, alt. 5.5, diam. 3.5 mm.



Hab.-Wei-hai-wei Island, N.E. China.

This species has probably been introduced into Wei-hai-wei Island, perhaps from Tien-tsin, or even from the opposite mainland. Specimens are very numerous in the courtyards of a few ruined houses above and to the east of the naval sick-quarters. Unlike Succinea Sinensis it has not been noticed in flower-pots.

LIMNEA (GULNARIA) SCHWILPI, n.sp.

Shell oblong-ovate, subperforate, pale reddish horn colour, whorls 4, the first two much eroded, the lower marked with transverse growth-lines, and presenting a slightly malleated appearance, the penultimate whorl moderately convex, the last whorl considerably inflated; sutures well impressed, faintly crenulate; columella



descending very obliquely, much twisted, outwardly expanded, and extending into a thickish callus, which reaches the lip above; peristome acute, slightly reflexed below, simple above; aperture broadly inversely auriform, dilated below. Alt. 23.5, diam. maj. 13 mm. Aperture, alt. 16.5, diam. maj. 9.5 mm.

Hab .- Shi Tao, Shantung, N.E. China.

Confined, like so many other species in this part of China, to one piece of water.

LIMNEA (GULNARIA) LUMLEYI, 11.Sp.

Shell ovate, contracted below, scarcely perforate, semi-transparent, pale reddish horn colour; whorls 4, the first three very small in

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proportion to the last, last whorl showing traces of very minute spiral striæ, and sculptured with transverse growth-lines; sutures impressed; columella iridescent, descending obliquely, scarcely twisted, diffused above into an almost imperceptible, thin callus; peristome acute; aperture ovate. Alt. 13, diam. maj. 8 mm. Aperture, alt. 9, diam. 5 mm.



Hab.-Wei-hai-wei Island, N.E. China.

Differing from *L. Schwilpi* chiefly by its much smaller size and by the columella, which, being scarcely twisted and not nearly so oblique, is not expanded into the very thick callus of that form; the aperture is also more ovate and much less auriform in shape. This species appears to be confined to a very shallow and narrow gutter or ditch which runs along the side of the road leading to the Golf Links.

LIMNEA (GULNARIA) SINENSIS, n.sp.

Shell ovate, subrimate, semi-transparent, rather glossy, pale greyishyellow horn colour; whorls 5, rapidly increasing, the first two very acuminate, the last swollen and dilated, sculptured with lines of growth and distant spiral scratch-like striæ; sutures well impressed;



columella vitreous, excavated below, diffused above into a moderately thick dilated callus which joius the lip above; peristome acute, simple; aperture broadly dilated, ovate. Alt. 23 5, diam. maj. 15 mm. Aperture, alt. 17, diam. 10 mm.

Hab.-Shi Tao, Shantung Province, N.E. China.

Confined to a limited area like most species of the genus in China.

VIVIPARA CHINENSIS, Gray.

This common Chinese species was obtained at Shi Tao, and as it has been noticed in our previous paper as occurring at the Chusan Islands and about Hong-Kong, it has a considerable distribution north and south. Like the previous species it appeared to be closely PROCEEDINGS OF THE MALACOLOGICAL SOCIETY.

confined to one particular locality. The shells are much browner, and not so large as those found further south.

VIVIPARA SUBANGULARIS, Von Martens.

This species was found in enormous numbers, but entirely confined to two small ponds on the golf-links of Wei-hai-wei Island. The two ponds were quite shallow, and divided from each other by a few feet of earth only; in size they may have been 40 feet square. Although there are sundry other ponds on this small island, apparently quite as capable of supporting colonies of Viviparæ, they do not contain a single individual. We think this species has been recently introduced. We do not know whether it has occurred so far north before, and it was originally described from the Chusan Islands.

TURBO (MARMOROSTOMA) CORONATUM, Desh.

A common species upon the rocks at Shi Tao in Shantung.

CHLOROSTOMA RUSTICUM (Gmel.).

Hab.—Shi Tao, Shantung, N.E. China.

ACMÆA CONCINNA, Lischke.

A fairly common shell on the rocks by the seashore at Shi Tao in Shantung.

TAPES SEMIDECUSSATUS, Desh.

A few specimens from Shi Tao in Shantung.

CORBICULA FLUMINEA (Müll.).

A few specimens were obtained at Shi Tao in the province of Shantung.